

I claim:

1. A method of producing a hollow section with internal reinforcement, which comprises:

coating a solid core ~~material~~ with activatable material;

enclosing the solid core material and the activatable material  
with an outer plate to form an assembly with a defined cavity  
inside said outer plate;

passing the assembly to a corrosion treatment bath and  
subjecting all interior areas of the assembly to a corrosion  
protection agent; and

subsequently passing the assembly to a drying oven for initiating foaming of the activatable material and filling the cavity defined cavity with the activatable material.

2. The method according to claim 1, wherein the cavity is defined between the outer plate and the activatable material.

3. The method according to claim 1, wherein the cavity is completely filled by foaming the activatable material

4. The method according to claim 1, wherein the solid core material is formed of a foamed metallic material.

5. The method according to claim 1, wherein the solid core material is formed of an unfoamed metallic material.

6. The method according to claim 1, wherein the solid core material is formed of a synthetic material reinforced with fibers selected from the group consisting of metal fibers, carbon fibers, and glass fibers.

7. The method according to claim 1, wherein the solid core material is formed of a hollow section.

8. The method according to claim 1, which comprises maintaining a temperature for coating the solid core material lower than a stoving temperature for an anticorrosion layer in the drying oven.

9. The method according to claim 1, which comprises forming the cavity between the activatable material and the outer plate with spacers formed on the activatable material.

10. The method according to claim 1, wherein the coating step comprises coating the solid core material with the activatable material only in some areas.

11. The method according to claim 1, which comprises selecting the core material and the outer material from the

group of materials consisting of reinforcing foam, energy-absorbing foam system, and an acoustic foam.

12. The method according to claim 11, which comprises forming the core material from an energy-absorbing material and selecting an outer material used for coating from the group of materials consisting of a reinforcing material and an acoustic foam.

13. The method according to claim 11, which comprises forming the core material from a reinforcing material and selecting an outer material used for coating from the group consisting of an energy-absorbing material and an acoustic foam.

14. The method according to claim 11, which comprises forming the core material from an acoustic foam and selecting an outer material used for coating from the group consisting of a reinforcing material and an energy-absorbing material.

15. A hollow section, comprising:

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a solid core material formed of a material selected from the group consisting of foamed metallic material, unfoamed metallic material, synthetic material reinforced with fibers selected from the group consisting of metal fibers, carbon fibers, and glass fibers, and a hollow section;

activated, foamed material on said solid core material;  
 an outer plate enclosing said solid core material, with said  
 foamed material at least partly filling a defined cavity  
 between said solid core material and said outer plate;  
 said solid cover material, said foamed material, and said  
 outer plate being corrosion treated with a corrosion  
 protection agent and subsequent drying.

16. The hollow section according to claim 15, wherein said cavity is completely filled by said foamed material.

17. The hollow section according to claim 15, wherein said solid core material is coated with said foamed material only in some areas.

18. The hollow section according to claim 15, wherein said core material and an a coating outer material are formed of material selected from the group consisting of a reinforcing foam, an energy-absorbing foam system, and an acoustic foam.